# Extent of obesity not strongest factor for patients when choosing weight loss operation

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A new study investigating why obese patients choose one type of weight loss operation over another reveals that the main factors influencing decision making are whether patients have type 2 diabetes, how much weight they want to lose, and their tolerance for surgical risk to achieve their ideal weight. Unlike findings from previous studies the patient's body mass index (BMI), or measure of obesity, does not play a significant role in the decision-making process according to study results published in the December issue of the *Journal of the American College of Surgeons*.

"BMI alone was not an important determinant, suggesting that patients and their surgeons considered the whole patient and what was important to him or her," according to principal investigator Christine C. Wee, MD, MPH, associate professor of medicine at Beth Israel Deaconess Medical Center and Harvard Medical School, Boston.

"This finding was reassuring," said Dr. Wee, who also is associate section chief for research in the Division of General Medicine and Primary Care at Boston's Beth Israel Deaconess Medical Center, one of the sites where the study was conducted.

However, Caroline Apovian, MD, the lead author of the study, said, "One unexpected and concerning finding was that patients who reported having more uncontrolled eating were actually more likely to undergo the less effective laparoscopic banding procedure than gastric bypass."

Dr. Apovian is professor of medicine and pediatrics at Boston University School of Medicine and director of Nutrition and Weight Management Center at Boston Medical Center, which served as a second study site. She speculated that patients who have poorer control over their eating patterns choose the banding procedure because it is reversible, and gastric bypass typically is not.

Laparoscopic gastric banding makes the stomach smaller by wrapping a band around part of the stomach. The surgeon can later adjust the band to allow less or more food intake, or even remove the band altogether. Surgeons use small incisions during a laparoscopic procedure. Roux-en-Y gastric bypass, one of the most common bariatric surgical procedure in the U.S.,[1] removes part of the stomach and reroutes the digestive tract so that food bypasses most of the stomach, thus limiting absorption of calories. Surgeons perform gastric bypass with either an "open" surgical approach or, more often, a laparoscopic approach.

Gastric bypass produces greater and more sustainable weight loss over time than other weight loss procedures but involves a slightly higher risk of complications, said coauthor Daniel B. Jones, MD, MS, FACS, a bariatric surgeon at Beth Israel Deaconess Medical Center and professor of surgery at Harvard.

At the time of the study, gastric banding was the second most common bariatric procedure, according to Dr. Jones. A newer procedure, laparoscopic sleeve gastrectomy, was uncommon when the operations in the study were performed between June 2008 and October 2011,[2] but is now more popular than gastric banding because it generally provides better results, he explained.

The researchers at Beth Israel Deaconess, along with colleagues at Boston Medical Center and the Center for Survey Research at the University of Massachusetts, Boston, conducted the Assessment of

Bariatric Surgery, or ABS, Study.

This study included 536 adults who had either gastric bypass (297 patients) or gastric banding (239 patients) and who completed a one-hour telephone interview within the 18 months prior to the operation. Study subjects answered interview questions about perceptions such as their ideal weight as well as about factors that motivated them to decide to have a bariatric surgical procedure. They also reported how willing they were to accept the risks to lose weight.

In addition, participants rated their quality of life and their level of emotional eating and uncontrolled eating. Information about patients' demographic characteristics, BMI, and obesity-related diseases came from their medical records. The researchers analyzed the data by accounting for patients' demographics, such as age and BMI, as well as for patient preferences and eating behaviors.

Patients who opted for gastric bypass over gastric banding were more likely to have type 2 diabetes, poorer quality of life, a higher weight loss goal, and greater tolerance for assuming risk related to treatment, the investigators reported.

Those who exhibited a higher degree of uncontrolled eating were more likely to choose gastric banding. Although patients who underwent banding had a lower average BMI, meaning they were less obese than those who had gastric bypass, the authors reported that this difference was not statistically significant after adjustment for patient preferences and eating behavior.

Dr. Wee said the study results suggest that behavioral characteristics and patient preferences may be as, or more, influential than BMI in the decision-making process.

"It is important that patients talk to their surgeons about their values, weight loss goals and concerns, such as aversion to risk, the level that obesity has adversely affected their quality of life, and their potential challenges to losing weight, including their eating behaviors," Dr. Wee said. "This information will help the surgeon better guide the patient in choosing a weight loss operation."

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1. Nguyen NT, Masoomi H, Magno CP, et al. Trends in use of bariatric surgery, 2003-2008. J Am Coll Surg 2011 ;213:261- 266.
2. Nguyen NT, Nguyen B, Gebhart A, Hohmann S. Changes in the makeup of bariatric surgery: a national increase in use of laparoscopic sleeve gastrectomy. J Am Coll Surg 2013; 216:252-257.

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